

STATOR HAVING REDUCED FORCES AT GENERATOR STATOR
KEY BAR AND METHOD FOR FORMING THE SAME

ABSTRACT OF THE DISCLOSURE

5 A stator and a method of forming the stator comprises providing a
stator frame having a frame plate, and connecting key bars to the frame plate
at respective connection points, each of the key bars having a dovetail. The
stator and method further includes providing a stator core comprising
laminations each having a dovetail slot formed therein. Each dovetail is
engaged into a respective dovetail slot so that at least some of the dovetails
10 contact respective laminations at respective contact points. The locations of
the contact points are controlled such that a force load transmitted by the
contact points is evenly distributed among the contact points to thus minimize
the maximum force transmitted. The location of the contact points is
controlled such that a key bar stress at the connection points is also
15 minimized.